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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/799,087 | 03/12/2004 | Steve G. Bjorg | MSFT121271 | 8511 |
| 26389 7590 11/26/2007 CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347 | | | EXAMINER CHANG, JUNGWON | |
| | | | ART UNIT 2154 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/799,087 | Applicant(s) BJORG, STEVE G. | |
| | Examiner Jungwon Chang | Art Unit 2154 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to preliminary amendment filed 5/11/05. Claims 1-15 are presented for examination.

2. IDS filed on 3/12/2004 has been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al. (US 7,117,264), hereinafter Becker.

5. As to claim 1, Becker discloses the invention as claimed, including a decentralized computing environment (col. 4, line 64 – col. 5, line 28), comprising:

a number of nodes (fig. 1; col. 4, lines 25-36), each node in the number of nodes being capable of being a neighboring node of other nodes in the number of nodes (col. 2, lines 6-14, "neighbor peer node"), each node being capable of querying the

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availability of neighboring nodes for a match, the match being formed when a first node queries the availability of a second node and the second node queries the availability of the first node (col. 1, lines 8-17; col. 2, lines 15-42, "query command may be forwarded from the current peer node to a predetermined number of neighbor peer nodes"; col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 indicating whether target device 112 has the file that target device 114 is seeking").

6. As to claim 2, Becker discloses the decentralized computing environment of claim 1, wherein another match is formed when the first node queries the availability of the second node and the second node responds with a yes message (col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 *indicating whether* target device 112 has the file that target device 114 is seeking").

7. As to claim 3, Becker discloses the decentralized computing environment of claim 1, wherein no match is formed when the first node queries the availability of the second node and the second node responds with a no message (col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 *indicating whether* target device 112 has the file that target device 114 is seeking").

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker, in view of Shah-Heydari (US 2003/0126299).

10. As to claims 4 and 5, Becker discloses *a node that queries* the nodes to communicate to find a match (col. 1, lines 8-17; col. 2, lines 15-42, "query command may be forwarded from the current peer node to a predetermined number of neighbor peer nodes"; col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 indicating whether target device 112 has the file that target device 114 is seeking"). However, Becker does not specifically disclose an inviter that invites the number of nodes to communicate to find a match. Shah-Heydari discloses an inviter that invites the number of nodes to communicate to find a match (page 1, 0007, "invitation to become a child of a first adjacent node"; page 5, 0046, "upon receiving the invitation message"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Becker and Shah-Heydari because Shah-Heydari's inviting the number of node would dynamically reconfiguring the network by accepting the inviter's invitation (Shah-Heydari, page 5, 0050).

11. As to claim 6, Becker discloses the invention substantially as claimed, including a computer-implemented protocol for matching communicable nodes in a dynamic,

decentralized computing environment, the protocol comprising:

querying nodes to communicate to find a match (col. 1, lines 8-17; col. 2, lines 15-42, "query command may be forwarded from the current peer node to a predetermined number of neighbor peer nodes"; col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 indicating whether target device 112 has the file that target device 114 is seeking");

discovering matching availability of nodes by sending availability messages (col. 7, line 65 – col. 8, line 11, "discovery data messages"; col. 17, lines 26-65, "sends a query to neighbor devices"); and

forming a match where upon sending another availability message from a first node to a second node, the second node sends a message selected from a group consisting of an availability message and a yes message (col. 1, lines 8-17; col. 2, lines 15-42, "query command may be forwarded from the current peer node to a predetermined number of neighbor peer nodes"; col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 indicating whether target device 112 has the file that target device 114 is seeking"; col. 17, lines 37-65).

12. Becker discloses *querying* the nodes to communicate to find a match. However, Becker does not specifically disclose an inviter that invites the number of nodes to communicate to find a match. Shah-Heydari discloses an inviter that invites the number of nodes to communicate to find a match (page 1, 0007, "invitation to become a child of a first adjacent node"; page 5, 0046, "upon receiving the invitation message"). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Becker and Shah-Heydari because Shah-Heydari's inviting the number of node would dynamically reconfiguring the network by accepting the inviter's invitation (Shah-Heydari, page 5, 0050).

13. As to claims 7, it is rejected for the same reasons set forth in claim 6 above.

14. As to claims 8 and 9, Becker discloses receiving by the second node the availability message sent from the first node, the second node answering with a no message to the first node if the second node has already been matched to another node, otherwise, a taken state of the second node is set to true signifying that the second node being matched to the first node (608, fig. 6; col. 14, lines 14-17).

15. As to claim 10, Becker discloses further comprising setting a taken state of the first node to true signifying that the first node is matched to the second node (col. 1, lines 8-17; col. 2, lines 15-42, "query command may be forwarded from the current peer node to a predetermined number of neighbor peer nodes"; col. 9, lines 34-63, "broadcast a query message...send a response message to target device 114 indicating whether target device 112 has the file that target device 114 is seeking"; col. 17, lines 37-65).

16. As to claim 11, it is rejected for the same reasons set forth in claim 6 above. In

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addition, Becker discloses a computer-readable medium having computer-executable instructions for performing a method for matching communicable nodes in a dynamic (col. 18, lines 43-59).

17. As to claim 12, it is rejected for the same reasons set forth in claim 7 above.

18. As to claims 13 and 14, they are rejected for the same reasons set forth in claims 8-9 above.

19. As to claim 15, it is rejected for the same reasons set forth in claim 10 above.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Rune et al, US 2004/0153520, Taylor et al, US 2004/0215667, Chen et al, US 2002/0169846, Danieli et al, US 7,240,093 disclose a method and system for selecting of participants and joining new instances of multiplayer in online electronic games.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 6:30-2:00 (Monday-Friday).

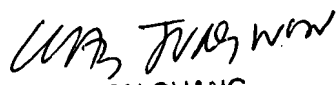
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number

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for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 23, 2007


JUNGWON CHANG
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100